

REMARKS

Reconsideration of the application is respectfully requested for the following reasons:

1. Correction of Informality

The paragraph bridging pages 2 and 3 of the original specification has been amended to correct a typographic error.

2. Rejection of Claims 1, 2, 7-9, and 12 Under 35 USC §102(e) in view of U.S. Patent No. 6,658,253 (Berggren)

This rejection is respectfully traversed on the grounds that the Berggren patent does not disclose or suggest a mobile voice communication method that provides for switching an ongoing mobile telephone call between Internet gateways, as claimed, by providing a call transfer procedure that permits the on-going call to a “second” gateway to be directly transferred between a “first” gateway to a “third” gateway at the request of the “third” gateway, by sending a facility message from the third gateway to the first gateway, thereby achieving a call transfer between subscriber mobile switching centers without involving the public switch telephone network (PSTN) call center or an analogous central call management center.

Instead of providing for call transfers through the use of direct communications between gateways at one end of an Internet telephone call, the Berggren patent concerns a procedure for handing off telephone calls between microcellular networks using a **macrocellular** network, the Internet being used solely to supply call management information from the macrocellular network to different **microcellular** networks. Berggren does not disclose any procedure for transferring a call that is initially being carried by the Internet from a first mobile switching station to a second mobile switching station, so that the call can be continue to be carried *by the Internet* between a third mobile switching station and the second mobile switching station, thereby enabling the *Internet* telephone call to be maintained as a *mobile* phone wanders from one cell

to another in the mobile network. Such roaming is possible in conventional networks, but currently requires involvement of the public switch telephone network (PSTN).

The present invention simply seeks to improve efficiency by providing for the call transfer to be handled solely by the first, second, and third Internet gateways involved in the call, and not by the PSTN. This has nothing to do with the call hand-off between macro and microcellular networks taught by Berggren, in which the "hand-off" involves leaving a subscriber network and entering a non-subscriber network and therefore must be managed by a some type of visitor register arranged to provide **registration** and **admission** information. **The claimed invention does not involve registration and admission to a new network, but merely call transfer between stations in a single network.** The Berggren patent is not concerned with transferring calls during roaming from one subscriber mobile switching station to another, the calls themselves being carried by the Internet rather than by the mobile networks to which the mobile switching centers belong, but rather with inter-network roaming.

In particular, claim 1 specifically recites a call transfer procedure in which:

- a. before initiating the call transfer procedure, the second mobile switching center (into whose cell the mobile host telephone has roamed) sends a location update indication with information concerning the first Internet gateway to a third Internet gateway for updating location information; and
- b. **the call transfer process initiated by the second mobile switching center is then carried out between the first and third Internet gateways through which the call itself is respectively routed.**

As a result of this procedure, Internet calls initiated by a mobile telephone can be transferred from one mobile switching station to another solely by communications between Internet gateways connected to the respectively mobile switching stations. This is not a matter of managing calls carried by different types of *cellular* networks, as in Berggren, but merely a matter of providing a procedure for transferring calls between Internet gateways connected to different mobile switching stations of a single cellular network.

In fact, one of the advantages of the invention is that it achieves the transfer without involving a central home location register (HLR) as taught by Berggren, but rather is carried out at the request of the mobile switching centers between the gateways connected thereto. The HLR taught by Berggren is analogous to the PSTN to which Internet calls are referred in the system of Fig. 3 of the present application, even though the HLR of Berggren happens to be connected through TCP/IP connections to the respective mobility servers.

Unlike conventional Internet telephony systems using the H.323 protocol, call transfers according to the invention are carried out exclusively by respective Internet gateways connected to the two mobile switching centers between which the mobile telephone has roamed. In contrast, the Berggren patent concerns a procedure for providing services to mobile telephones visiting different types of networks, and in particular a first **microcellular** network such as DECT and a second **macrocellular** network such as GSM, as stated in the abstract of the Berggren patent. **The Berggren patent does not teach any sort of call transfer procedure, much less one that offers VoIP (Internet Telephony) mobility support by utilizing the existing communication standard to achieve a handoff procedure *exclusively* over the Internet, between Internet gateways. The "call transfer procedure" referred to by the Examiner is not a call transfer procedure of the type claimed, in which an ongoing call is transferred from one gateway to another as a mobile telephone roams between first and second mobile switching centers, but to the contrary involves a establishing a connection during roaming that involves different types of cellular networks.**

In the procedure described in the Berggren patent, as shown in Figs. 2 and 3 and described in col. 10, lines 55-56, the connection is operated through a central home location register (HLR) 36 connected via the Internet to the two microcellular network mobility servers 14, which in turn are connected to the respective mobile switching stations for the macrocellular GSM network. **The Internet connections are used solely for call management functions in the microcellular network and not to carry the telephone calls using the H.323 procedure.** There is no procedure for transferring a call from one gateway to another, as one of the parties

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to the call roams from one mobile switching center cell to another. The Internet is used to communicate mobility management information to facilitate “handoffs” between mobile switching stations connected to different microcellular networks, and not to enable call “transfers” during roaming from one switching center to the other while calling another mobile switching center “at the other end of the Internet,” as claimed.

Because the Berggren patent does not disclose call transfers between Internet gateways at one end of an Internet telephone call, the transfers being initiated by the respective mobile switching stations connected to the gateways, and carried out exclusively by communications between Internet gateways without involving a central register, whether in the form of a PSTN or the HLR of Berggren, it is respectfully submitted that the Berggren patent does not anticipate the claimed invention, and withdrawal of the rejection of claims 1, 2, 7-9, and 12 under 35 USC §103(a) is respectfully requested.

3. Rejection of Claims 3 and 10 Under 35 USC §103(a) in view of U.S. Patent Nos. 6,658,253 (Berggren) and 6,519,242 (Emery)

This rejection is respectfully traversed on the grounds that the Emery patent, like the Berggren patent, does not disclose or suggest a mobile voice communication method that provides for switching an ongoing mobile telephone call between Internet gateways, as claimed, by providing a call transfer procedure that permits the on-going call to be directly transferred from one gateway to another without involving the public switch telephone network (PSTN) call center.

Instead, the Emery patent discloses a “visitor location register” similar to the HLR of Berggren, so that when a subscriber roams to a remote network, the respective remote gatekeeper in Emery needs to forward the request to a respective visitor location register for exchanging registration and admission information (see col. 4, lines 15-22, and col. 6, lines 22-26). In the claimed invention, the gatekeeper is not required to cooperate with a VLR because, in the present invention, the call transfer procedure is invoked by the “third gateway,” *i.e.*, the Internet gateway

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connected to the mobile switching station into whose area the subscriber has moved from the first mobile switching station, by sending a facility message from the third gateway **directly** to the first gateway, without intervention of a VLR as in Emery or an HLR as in Berggren.

Because the combination of Berggren and Emery therefore does not disclose or suggest, whether considered individually or any reasonable combination, the third gateway which invokes the wireless call transfer procedure via the Internet, without using the gatekeeper and the HLR of the applied references, or any type of PSTN, it is respectfully submitted that the claimed invention is not "obvious" over the Berggren and Emery patents, and withdrawal of the rejection of claims 3 and 10 under 35 USC §103(a) is respectfully requested.

Having thus overcome each of the rejections made in the Official Action, withdrawal of the rejections and expedited passage of the application to issue is requested.

Respectfully submitted,

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